Technology

Goals and Strategies

To help the state realize the vision, 12 goals and 32 strategies have been established.

The statewide information technology plan responds to global, national, and statewide trends and issues affecting information technology use in North Dakota State government. The vision, goals, and strategies expressed in this plan are designed to improve the management of information resources within the state. They also drive state agencies' planning for information technology, and should be a major source of guidance during any agency strategic planning effort.

The vision for information technology describes how North Dakotans will interact with government and government information technology in the future. The vision is of a future where information resources serve to make government more accessible, open, efficient, and productive for the citizens of our state.

To help the state realize the vision, 12 goals and 32 strategies have been established to provide the general direction for state government's use of information resources. These goals are categorized within each of the statewide vision threads and, along with their supporting strategies, provide an outline to assist the state in achieving its information technology objectives.

Customer Focused

Goal 1: Build E-Government

Provide access to government information and services through a secure Internet connection.

Strategy: The Information Technology Department (ITD), working with state agencies, will develop and promote a "Strategic North Dakota Digital Government" plan that focuses on the following key elements:

- ♦ Applications: Establish a coordinated, customer-focused approach to developing integrated web-enabled applications.
- ♦ Infrastructure: Establish an infrastructure that addresses items such as portals, secure access service, universal web design guidelines, security, secure signatures, e-payments, open records and privacy issues, digital archive, and help desk.
- ♦ Policies and standards: Develop policies and standards to serve as guiding principles outlining the general course of action to be followed and to direct digital government activities toward the goal of providing cheaper, better, and faster services to the public.

Strategy: ITD, with the involvement of state agencies, will identify web-application development options that provide affordable alternatives to agencies wishing to bring services online.

Strategy: Legislation should be passed to reconstitute the State Information Technology Advisory Committee allowing broader statewide representation and providing greater customer perspective.

Goal 2: Promote "Anytime – Anywhere" Education

Expand the offering of online educational courses and programs available to North Dakotans and make them available through a variety of delivery methods.

Strategy: The Education Telecommunication Council (ETC) will provide IT leadership and coordination of the various supporting entities for K-12.

Strategy: K-12 districts should form additional interactive video consortiums. The ETC should target grant funding to provide the necessary equipment.

Strategy: The Higher Education Computer Network IVN group will provide support for the statewide interactive video network, including K-12.

Strategy: The North Dakota University System (NDUS) will provide affordable, accessible education and training to both urban and rural areas of the state as outlined in the "ND University System for the 21st Century" report.

Efficient

Goal 3: Encourage Enterprise-wide Solutions

Maximize information technology investments by improving and promoting the collaboration, both among agencies and with other stakeholders, of enterprise-wide technology solutions.

Strategy: ITD will implement a centralized Geographical Information System (GIS) hub to enable sharing of GIS among users within state government, political subdivisions, and the federal government.

Strategy: ITD, in cooperation with various stakeholders, will proceed with plans to integrate the systems for collecting and reporting criminal justice information to provide better service to the customers of the systems.

Strategy: ITD will develop and support a centralized Electronic Document Management System (EDMS) infrastructure for state agencies.

Strategy: ITD, partnering with OMB, NDUS, and K-12 districts, will pursue an Enterprise Resource Planning (ERP) solution that will integrate the core financial and administrative applications of state government, higher education, and public education.

Strategy: ITD and the NDUS will acquire data warehousing and decision support tools that fully integrate with the ERP system and other vital state management information systems to facilitate strategic planning, tactical operations, and system-wide analysis.

Goal 4: Reinvent Government

Strive to reinvent state government by removing barriers to cooperation, aligning delivery of products and services from an integrated, customer focused approach, and providing opportunities for user input, outside expertise, and business process redesign.

Strategy: ITD will develop information resources, guidelines, and procedures to promote the practice of assessing and redesigning business processes within state government.

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Strategy: ITD will require business process assessments as a prerequisite to all information technology projects falling under the "large project reporting" guidelines.

Well Managed

Goal 5: Strengthen State IT Professionals

Recruit, train, and retrain state government technology professionals.

Strategy: Central Personnel, in cooperation with ITD and NDUS, will develop a list of statewide information technology educational opportunities.

Strategy: Central Personnel and ITD, with the involvement of state agencies, will develop responsive action plans that respond to IT workforce issues. Specific actions will focus initially on:

- ♦ Developing incentive alternatives to help recruit and retain IT employees.
- ♦ Developing comprehensive recruitment initiatives that would include active internship programs.
- ♦ Developing training and scholarship programs for state employees with skills, abilities and interests in a technology career.

Strategy: ITD will acquire statistics to help agencies determine appropriate support staffing levels for information technology positions.

Goal 6: Advance Project Management

Effectively manage state government information technology projects by utilizing the practices and techniques of professional project management.

Strategy: ITD and the NDUS will continue to develop and promote educational opportunities that develop or enhance the project management skill of individuals responsible for projects.

Strategy: ITD will encourage the use of certified project managers to oversee IT projects and require all projects falling under the categorization of a "large project" to be managed by qualified project managers.

Goal 7: Coordinate Technology Research & Planning

Coordinate and share the research of emerging information technologies across all of state government.

Strategy: ITD will develop a centrally coordinated process to facilitate and communicate information technology research in state government. The process will study industry trends and analyze agency objectives to determine areas where collective research would provide benefit. The process should also bridge research activity between state government and higher education.

Strategy: ITD and NDUS will assess opportunities and initiate pilot projects employing leading edge technologies such as Internet access from hand-held devices, electronic business-to-business transactions, wireless broadband communications, voice over IP, or voice recognition.

Goal 8: Fund Innovations

Provide more flexible mechanisms to support the funding requirements of information technology projects.

Strategy: ITD will obtain legislative approval to establish an Innovation Fund. The fund will serve as a funding mechanism for key technology initiatives.

Strategy: ITD will pursue bonding as an option to finance large-scale information technology initiatives, such as the Enterprise Resource Planning initiative.

Leadership for Developing a Shared Infrastructure

Goal 9: Integrate State Broadband Network

Build a network infrastructure to support digital opportunities for economic development, life long learning, and government services throughout the state.

Strategy: ITD will expand the statewide network to every public high school.

Strategy: SENDIT Technology Services, ITD, NDUS, and the Association of Counties will expand their support services to meet the demands of the growing number of network users.

Strategy: ITD will leverage the state broadband network by providing assistance to local entities to create community networks.

Goal 10: Modify Public Policy

Evaluate and modify current legislation and policy to reflect the needs of a digital society.

Strategy: ITD, working with the legislative information technology committee and other government leaders, will monitor federal and state legislation and proposed uniform state laws to identify implications for North Dakota, particularly with respect to privacy, security, and validity of online transactions.

Strategy: The Chief Information Officer, working with leaders from government and private industry, will identify and advance public policies to promote universal access to online services and encourage widespread economic development.

Goal 11: Develop Workforce

Assist North Dakota in becoming a player in the digital economy by developing a highly trained workforce that attracts new businesses and provides technical support to existing businesses.

Strategy: The NDUS will expand workforce development programs to meet the needs of ND employers.

Strategy: The ETC, Center for Innovation and Instruction, and SENDIT Technology Services will develop and promote programs that serve to expand curricula and technology training to the teachers and administrators who will integrate technology into K-12 classrooms.

Goal 12: Enhance State Radio Network

Expand the capabilities of the state radio network to provide mobile data communication and migrate to newer digital technologies.

Strategy: State Radio will identify and implement a plan to convert the existing network from analog to digital.

Strategy: State Radio will develop a plan to formulate a systems design concept that supports future mobile voice, data, and imaging requirements

Strategy: State Radio and Highway Patrol will expand the mobile data terminal (MDT) system by 10 towers and 36 additional cars.